IN RESPONSE TO THE OFFICE ACTION:

The applicant has very carefully reviewed every each point the examiner has provided in this office action, and found that the Examiner has misunderstood the following key points in the present invention:

1. The CAI-BIOS as recited in most claims of this application is a **proprietary** digital signal processing architecture core platform based on open baseband processing architecture of the Open Wireless Architecture (OWA) ® **invented** by Prof. Willie Wei Lu, my research supervisor. This CAI-BIOS is a very unique and revolutionary signal processing architecture core to define the open air interface parameters for the converged broadband wireless communications of different wireless standards. The CAI-BIOS is our very **proprietary** technology platform (Invented by Prof. Lu) rather than any general basic input and output system. Same as Steve Wozniak invented his first computer by defining his proprietary computer BIOS, this became one of the flagship intellectual properties of Apple Computers. Therefore, please understand again that the CAI-BIOS (Common Air Interface BIOS) is our proprietary and critical technology core platform of the present invention.

2. This invention is an architecture invention instead of a product invention, and hence the application is basically focusing on the definition of the system architectural modules. Going beyond the architectural modules are the proprietary product design details including hardware components and software protocols/signaling which are out of scope of this architectural invention.

To further limit the application, most of claims have been amended to more particularly point out and distinctly claim the invention for which protection is being sought, by adding the limitation of "digital signal processing architecture core (DSPAC)" with previous limitation "CAI-BIOS" to present the **proprietary** architecture platform of "CAI-BIOS DSPAC".

In order to further explain the distinction of our application versus the prior arts, please allow me to organize the responses into two parts - 35 USC § 112 and 35 USC § 103.

35 USC § 112

Applicant respectfully traverses the § 112 rejections with the following arguments:

Applicant contends that claims 1-6 and 8-15, as amended, disclose full specification as a system architecture invention, to enable one skilled in the art to implement the invention because system architecture is focusing on the definition of system functional blocks and definition of architectural modules. Applicant respectfully points out that in FIG.2-4 and the detailed description, Applicant discloses in details the system hardware modules and software modules and their implementation definitions.

Applicant further contends that the system architecture mainly relies on one or two principal architectural frameworks and several system architectural modules, rather than detailed product design issues, to enable the implementation of the invention. Applicant discloses such architectural frameworks and modules including CAI-BIOS DSPAC and its corresponding Common Access Point and Converged Wireless Terminal of the invention. Applicant respectfully points out that the disclosed specification provides enough details for enabling one skilled wireless system architect to make the invention and implement the system.

Regarding the use of "open" in modifying "interface" in many claims, the applicant contends that "open" is well used in the industry to mean "extensible, upgradeable and removable" because the application is focusing on the CAI-BIOS DSPAC which is a such open platform. Furthermore, the metes and bounds of these claims are limited by many conditions such as CAI-BIOS DSPAC, instead of this adjective word.

For other issues in this action, the applicant has amended all the related claims according to the Examiner's comments and suggestions.

35 USC § 103

Applicant respectfully traverses the § 103 (a) rejections with the following arguments:

For Claims 1-6 and 8, the Examiner repeated the same comments as stated in the Feb. 2007 Office action. The applicant contends that, with further limited to proprietary CAI-BIOS DSPAC platform, applicant believes that the arguments filed on April 27th, 2007 have successfully traversed the § 103 (a) rejections, because none of the cited prior arts is disclosing any solution based on such proprietary digital signal processing architecture.

Based on the prior arguments of April 27, 2007 response, Applicant respectfully maintains that claims 1-6 and 8 are not unpatentable over Jorgensen in view of Willhoff, Hagen and Kerr and are in condition for allowance.

Regarding Claim 9, Jorgensen never provides a solution to support software and hardware based on signal processing architecture in supporting multiple wireless standards. Furthermore, Jorgensen is only limited to IEEE 802.16 broadband wireless access (BWA) system.

Regarding Claim 10, same as above, Jorgensen never provides a solution to support processing based on CAI-BIOS signal processing architecture definition.

Regarding Claim 11, same as above, Jorgensen never provides any solution to reconfigure the common access point to function as router, soft switch or gateway through CAI-BIOS architecture definition. Instead, Jorgensen is limited to IEEE 802.16 wireless infrastructure only.

For Claims 12-15, applicant has amended the claims by following the Examiner's comments and suggestions.

As a summary, the applicant reiterates that:

a) Said CAI-BIOS is a **proprietary** digital signal processing architecture core by Open Wireless Architecture (OWA) ® technology **invented and patented** by Prof. Willie Wei Lu, Cupertino of California,

b) Said CAI-BIOS maps and controls different open air interfaces (wireless standards) into open interfaces parameters for processing in said broadband transceiver and said processing engine, etc,

c) Jorgensen's solution is limited to single air interface IEEE802.16 only,

d) Willhoff's solution is limited to transmission grouping with smart antenna in TDMA only,

e) Hagen's solution is limited to network access server within IEEE802.15 and IEEE802.11 only,

f) Kerr's solution is nothing to do with wireless system.

To further contend the distinction to the cited prior art references, request is respectfully made for amendment of Claims 1-6, 8-15 as enclosed.
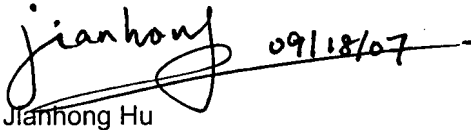
CONCLUSION

Based on the preceding arguments and the prior arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact the Applicant directly at the telephone number listed below.

Applicant has made earnest attempt to respond to all the points included in the last office action by preliminary amendment and argument. Consideration of the amended claims and notification of allowance of all pending claims are earnestly solicited.

Respectfully submitted,

BY:

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